ACCESSION NUMBER: 2000:773948 CAPLUS

DOCUMENT NUMBER: 133:335633

TITLE:

Production of 4,6-diaminoresorcinol

INVENTOR(S): Kumamoto, Yukihiro; Kusumoto, Masahiko; Itou, Hisato;

Mizuta, Hideki; Takaoka, Masazumi

PATENT ASSIGNEE(S):

Mitsui Chemicals, Inc., Japan Eur. Pat. Appl., 16 pp.

SOURCE: CODEN: EPXXDW

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
EP 1048644	A1	20001102	EP 2000-303678 20000502
EP 1048644			
			FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
		, FI, RO	
JP 2000319231 JP 3398338			
JP 2000344733	DZ 7.2	20030421	
JP 3398339		20001212	
JP 2001011025		20030421	
JP 3398340		20010110	
JP 2001039935		20030421	
JP 3398342	B2	20030421	
JP 2001114748		20010424	
JP 2001122843		20010508	
JP 3398347	B2	20030421	
JP 2001139685	A2	20010522	JP 1999-327647 19991118
JP 3380502	B2	20030224	
US 6359180	B1	20020319	US 2000-556814 20000421
CN 1276369	Α	20001213	CN 2000-117956 20000430
US 2002107415	A1	20020808	US 2002-58415 20020130
PRIORITY APPLN. INFO	.:		JP 1999-123328 A 19990430
			JP 1999-158850 A 19990607
			JP 1999-181093 A 19990628
			JP 1999-213013 A 19990728
			JP 1999-289055 A 19991012
			JP 1999-299465 A 19991021
			JP 1999-327647 A 19991118
n mb the		_	US 2000-556814 A3 20000421

The present invention relates to a novel prodn. method of 4,6-diaminoresorcinol (I), and to 2-sulfo-4,6-dinitroresorcinol(II) as its intermediate and salts thereof without involving the formation of a halogen-contg. compd. I is obtained by sulfonating resorcinol to provide 2,4,6-trisulforesorcinol, nitrating this compd. to yield II, hydrolyzing II to give 4,6-dinitroresorcinol, and finally reducing the dinitro compd. to obtain I, a monomer in the prodn. of poly(benzobisoxazoles).

303963-29-3P, 4,6-Dinitro-2-sulforesorcinol ΙT

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; in prodn. of diaminoresorcinol from resorcinol)

RN303963-29-3 CAPLUS

Benzenesulfonic acid, 2,6-dihydroxy-3,5-dinitro- (9CI) (CA INDEX NAME) CN

REFERENCE COUNT:

5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Uploading 10058415.str

## L1 STRUCTURE UPLOADED

=> id

ID IS NOT A RECOGNIZED COMMAND

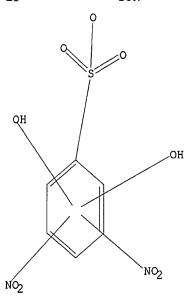
The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d

L1 HAS NO ANSWERS

L1

STI



Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 09:27:51 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 279 TO ITERATE

100.0% PROCESSED 279 ITERATIONS

0 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

4578 TO 6582

PROJECTED ANSWERS:

0 TO

L2 0 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 09:27:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4804 TO ITERATE

100.0% PROCESSED 4804 ITERATIONS SEARCH TIME: 00.00.01

1 ANSWERS

=> d scan

L3 1 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Benzenesulfonic acid, 2,6-dihydroxy-3,5-dinitro- (9CI)

MF C6 H4 N2 O9 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

=> file caplus COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 148.15 150.36

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 09:28:08 ON 21 OCT 2003
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FILE COVERS 1907 - 21 Oct 2003 VOL 139 ISS 17 FILE LAST UPDATED: 20 Oct 2003 (20031020/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 1 L3

=> d ibib abs hitstr

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:773948 CAPLUS

DOCUMENT NUMBER: 133:335633

TITLE: Production of 4,6-diaminoresorcinol

INVENTOR(S): Kumamoto, Yukihiro; Kusumoto, Masahiko; Itou, Hisato;

Mizuta, Hideki; Takaoka, Masazumi

PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan

SOURCE: Eur. Pat. Appl., 16 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO. DATE
EP 1048644	A1 20001102	2 EP 2000-303678 20000502
EP 1048644	B1 20030423	.3
R: AT, BE,	CH, DE, DK, ES,	FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI,	LT, LV, FI, RO	
JP 2000319231	A2 20001121	JP 1999-123328 19990430
JP 3398338	B2 20030423	21
JP 2000344733	A2 20001212	.2 JP 1999-158850 19990607
JP 3398339	B2 20030421	21
JP 2001011025	A2 20010116	.6 JP 1999-181093 19990628
JP 3398340	B2 2003042J	1
JP 2001039935	A2 20010213	JP 1999-158850 19990607  11  66  JP 1999-181093 19990628  11  3  JP 1999-213013 19990728
JP 3398342	B2 20030421	21
JP 2001114748	A2 20010424	11 4 JP 1999-289055 19991012
JP 2001122843	A2 20010508	JP 1999-299465 19991021 11 22 JP 1999-327647 19991118
JP 3398347	B2 20030421	1
JP 2001139685	A2 20010522	2 JP 1999-327647 19991118
JP 3380502	B2 20030224	4.4
US 6359180	B1 20020319	.9 US 2000-556814 20000421
CN 1276369	A 20001213	.3 CN 2000-117956 20000430
US 2002107415	A1 20020808	08 US 2002-58415 20020130 ·
PRIORITY APPLN. INFO	) <b>.:</b>	JP 1999-123328 A 19990430
		JP 1999-158850 A 19990607
		JP 1999-181093 A 19990628
		JP 1999-213013 A 19990728
		JP 1999-289055 A 19991012
		JP 1999-299465 A 19991021
		JP 1999-327647 A 19991118
		JP 1999-327647 19991118  ON 2000-556814 20000421  CN 2000-117956 20000430  US 2002-58415 20020130  JP 1999-123328 A 19990430  JP 1999-158850 A 19990607  JP 1999-181093 A 19990628  JP 1999-213013 A 19990728  JP 1999-289055 A 19991012  JP 1999-299465 A 19991021  JP 1999-327647 A 19991118  US 2000-556814 A3 20000421
AB The present inv	ention relates t	to a novel prodn. method of

AB The present invention relates to a novel prodn. method of 4,6-diaminoresorcinol (I), and to 2-sulfo-4,6-dinitroresorcinol(II) as its intermediate and salts thereof without involving the formation of a halogen-contg. compd. I is obtained by sulfonating resorcinol to provide 2,4,6-trisulforesorcinol, nitrating this compd. to yield II, hydrolyzing II to give 4,6-dinitroresorcinol, and finally reducing the dinitro compd. to obtain I, a monomer in the prodn. of poly(benzobisoxazoles).

IT 303963-29-3P, 4,6-Dinitro-2-sulforesorcinol

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; in prodn. of diaminoresorcinol from resorcinol)

RN 303963-29-3 CAPLUS

CN Benzenesulfonic acid, 2,6-dihydroxy-3,5-dinitro- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file beilstein		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	5.37	155.73
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.65	-0.65

5

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FILE RELOADED ON OCTOBER 20, 2002 FILE LAST UPDATED ON OCTOBER 6, 2003

FILE COVERS 1771 TO 2003.
\*\*\* FILE CONTAINS 8,773291 SUBSTANCES \*\*\*

>>> PLEASE NOTE: Reaction data and substance data are stored in separate documents and can not be searched together in one query.

Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a molecular formula or a structure search for example can be restricted to compounds with available reaction information by concatenation with PRE/FA, REA/FA or more general with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For more detailed reaction searches BRNs can be selected from substance answer sets and searched in the next step as reaction partner BRNs - Reactant (RX.RBRN) or Product BRN (RX.PBRN). After a search for reaction details substance documents associated with reactants or products may be retrieved by searching RX.PBRNs or RX.RBRNs as BRNs. <<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

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\* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE

\* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.

\* FOR PRICE INFORMATION SEE HELP COST

(FILE 'HOME' ENTERED AT 09:24:33 ON 21 OCT 2003)

FILE 'REGISTRY' ENTERED AT 09:24:43 ON 21 OCT 2003

FILE 'REGISTRY' ENTERED AT 09:27:36 ON 21 OCT 2003

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 1 S L1 FULL

FILE 'CAPLUS' ENTERED AT 09:28:08 ON 21 OCT 2003

L4 1 S L3

FILE 'BEILSTEIN' ENTERED AT 09:29:25 ON 21 OCT 2003

=> s l1 full

FULL SEARCH INITIATED 09:29:34 FILE 'BEILSTEIN'
FULL SCREEN SEARCH COMPLETED - 1755 TO ITERATE

100.0% PROCESSED 1755 ITERATIONS SEARCH TIME: 00.00.06

1 ANSWERS

DERICH 1111B. 00.00.00

L5 1 SEA SSS FUL L1

=> d ide

L5 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2003 BEILSTEIN CDS MDL on STN

Beilstein Records (BRN): 4080270

Chemical Name (CN): 2,4-Dinitroresorcin-6-sulfonsaeure-

Natriumsalz

1991/04/09

Lin. Struct. Formula (LSF): C6H3N2O9S(1-)\*Na(1+)
Fragm. Molec. Formula (FMF): C6 H3 N2 O9 S , Na
Molecular Formula (MF): C6 H3 N2 O9 S . Na
Molecular Weight (MW): 279.16, 22.99
Fragment BRN (FBRN): 4006964, 3587169

Lawson Number (LN): 13895
Compound Type (CTYPE): isocyclic
Constitution ID (CONSID): 3670292
Tautomer ID (TAUTID): 3922996
Beilstein Citation (BSO): 5-11
Entry Date (DED): 1991/03/19

Update Date (DUPD):

CM 1

FBRN 4006964

FMF C6 H3 N2 O9 S

FBRN 3587169 FMF Na

# Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	· 1
LSF	Linearized Structure Formula	1
		1
FMF	Fragment Molecular Formula	2
MF	Molecular Formula	1
FW	Formular Weight	2
FBRN	Fragment BRN	2
LN	Lawson Number	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
ED	Entry Date	1
UPD	Update Date	1
DE	Dissociation Exponent	1
UVS	UV and Visible Spectrum	1

=> d frxpro

L5 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2003 BEILSTEIN CDS MDL on STN

=> d bso

L5 ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2003 BEILSTEIN CDS MDL on STN Beilstein Citation (BSO): 5-11

=> d 5-11

1 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE The answer numbers requested are not in the answer set. ENTER ANSWER NUMBER OR RANGE (1):end

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
17.16

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY SESSION
CA SUBSCRIBER PRICE 0.00 -0.65

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Property values tagged with IC are from the  ${\tt ZIC/VINITI}$  data file provided by InfoChem.

STRUCTURE FILE UPDATES: 20 OCT 2003 HIGHEST RN 607332-91-2 DICTIONARY FILE UPDATES: 20 OCT 2003 HIGHEST RN 607332-91-2

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s 4 6-diemainoresorcin

13022856 4 5984303 6

0 DIEMAINORESORCIN

L6 0 4 6-DIEMAINORESORCIN

(4(W)6(W)DIEMAINORESORCIN)

=> s 4 6-diaminoresorcin

13022856 4 5984303 6

73 DIAMINORESORCIN

L7 69 4 6-DIAMINORESORCIN

(4(W)6(W)DIAMINORESORCIN)

=> d scan

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Undecanedioic acid, polymer with 4,6-diamino-1,3-benzenediol dihydrochloride (9CI)

MF (C11 H20 O4 . C6 H8 N2 O2 . 2 C1 H) x

CI PMS

<sup>\*\*</sup>RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

6 REFERENCES IN FILE CA (1907 TO DATE)
6 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1,4-Benzenedicarbonyl dichloride, polymer with 4,6-diamino-1,3-benzenediol

dihydrochloride, hydrazine sulfate (1:1) and 4,4'-oxybis[benzoyl

69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

=> d scan 17

chloride], block (9CI)

MF (C14 H8 C12 O3 . C8 H4 C12 O2 . C6 H8 N2 O2 . 2 C1 H . H4 N2 . H2 O4 S)x CI  $\,$  PMS

CM 1

$$\begin{array}{c|c} \text{H}_2\text{N} & \text{NH}_2 \\ \\ \text{HO} & \text{OH} \end{array}$$

●2 HC1

CM 2

CM 3

CM 4

CM 5

 $H_2N-NH_2$ 

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

Dodecanedioic acid, polymer with 4,6-diamino-1,3-benzenediol IN dihydrochloride (9CI)

MF (C12 H22 O4 . C6 H8 N2 O2 . 2 C1 H)x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

●2 HC1

CM 2

 $HO_2C-(CH_2)_{10}-CO_2H$ 

L7

69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN 1,3-Benzenedicarbonyl dichloride, polymer with 1,4-benzenedicarbonyl IN dichloride, 4,6-diamino-1,3-benzenediol dihydrochloride and 4,4'-oxybis[benzoyl chloride], block (9CI)

MF (C14 H8 C12 O3 . C8 H4 C12 O2 . C8 H4 C12 O2 . C6 H8 N2 O2 . 2 C1 H) x

CI PMS

> CM 1

●2 HC1

CM

L7

69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN 1,4-Benzenedicarboxaldehyde, 2,5-dihydroxy-, polymer with IN 4,6-diamino-1,3-benzenediol (9CI)

MF (C8 H6 O4 . C6 H8 N2 O2)x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3-Benzenediol, 4,6-diamino-, dipotassium salt (9CI)

MF C6 H8 N2 O2 . 2 K

#### ●2 K

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Poly(benzo[1,2-d:5,4-d']bisoxazole-2,6-diyl-1,10-decanediyl) (9CI)

MF (C18 H22 N2 O2)n

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Benzoic acid, 3-amino-4-hydroxy-, hydrochloride, polymer with 1,4-benzenedicarbonyl dichloride, 1,3,5-benzenetricarbonyl trichloride and 4,6-diamino-1,3-benzenediol dihydrochloride, block (9CI)

MF (C9 H3 C13 O3 . C8 H4 C12 O2 . C7 H7 N O3 . C6 H8 N2 O2 . 3 C1 H) x

CI PMS

CM 3

● HCl

CM

L7

69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

Isophthaloyl chloride, polymer with 4,6-diaminoresorcinol (8CI)
(C8 H4 Cl2 O2 . C6 H8 N2 O2)x IN MF

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 2,6-Naphthalenedicarboxylic acid, polymer with 4,6-diamino-1,3-benzenediol dihydrochloride (9CI)

MF (C12 H8 O4 . C6 H8 N2 O2 . 2 C1 H) x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

●2 HCl

CM 2

L7 69 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Tridecanedioic acid, polymer with 4,6-diamino-1,3-benzenediol dihydrochloride (9CI)

MF (C13 H24 O4 . C6 H8 N2 O2 . 2 C1 H) x

CI PMS

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

●2 HC1

2 CM

 $HO_2C-(CH_2)_{11}-CO_2H$ 

L769 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

1,3,5-Benzenetricarboxylic acid, polymer with 1,4-benzenedicarbonyl IN dichloride and 4,6-diamino-1,3-benzenediol dihydrochloride (9CI) (C9 H6 O6 . C8 H4 Cl2 O2 . C6 H8 N2 O2 . 2 Cl H)x

MF

CI PMS

> CM 1

●2 HCl

CM

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 17 not pms/ci 984197 PMS/CI

L9 3 L7 NOT PMS/CI

=> d scan

L9 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3-Benzenediol, 4,6-diamino-, dipotassium salt (9CI)

MF C6 H8 N2 O2 . 2 K

●2 K

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L9 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3-Benzenediol, 4,6-diamino- (9CI)

MF C6 H8 N2 O2

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L9 3 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3-Benzenediol, 4,6-diamino-, dihydrochloride (9CI)

MF C6 H8 N2 O2 . 2 Cl H

CI COM

## ●2 HCl

#### ALL ANSWERS HAVE BEEN SCANNED

```
=> s resorcin/cn
L10
           1 RESORCIN/CN
=> d
L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN
     108-46-3 REGISTRY
CN 1,3-Benzenediol (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Resorcinol (8CI)
OTHER NAMES:
CN
    1,3-Dihydroxybenzene
CN
     3-Hydroxyphenol
    C.I. 76505
CN
    C.I. Developer 4
CN
CN
     C.I. Oxidation Base 31
CN
     Developer O
CN
     Developer R
CN
     Developer RS
     Durafur Developer G
CN
CN
     Fouramine RS
CN
    Fourrine 79
CN
    Fourrine EW
CN
    m-Benzenediol
CN
     m-Dihydroxybenzene
CN
     m-Hydroquinone
CN
     m-Hydroxyphenol
CN
     m-Hydroxyphenol
CN
     m-Phenylenediol
CN
     Nako TGG
CN
     NSC 1571
CN
     Pelagol Grey RS
CN
     Pelagol RS
CN
     Redimix 401RAP60
CN
     Reso
CN
     Resorcin
CN
     Rodol RS
CN
     RS 11H
CN
     RS 11L
FS
     3D CONCORD
MF
     C6 H6 O2
CI
     COM
LÇ
     STN Files:
                  ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
       BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB,
       CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB,
       DDFU, DETHERM*, DIOGENES, DIPPR*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2,
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ENCOMPPAT, ENCOMPPAT2, GMELIN\*, HODOC\*, HSDB\*, IFICDB, IFIPAT, IFIUDB,

IPA, MEDLINE, MRCK\*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM\*, PIRA, PROMT, RTECS\*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USAN, USPAT2, USPATFULL, VTB

(\*File contains numerically searchable property data)

Other Sources: DSL\*\*, EINECS\*\*, TSCA\*\*

(\*\*Enter CHEMLIST File for up-to-date regulatory information)

## \*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

13673 REFERENCES IN FILE CA (1907 TO DATE)
1086 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
13695 REFERENCES IN FILE CAPLUS (1907 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> s sulfonate and resorcin

117163 SULFONATE

128 SULFONATES

117163 SULFONATE

(SULFONATE OR SULFONATES)

3708 RESORCIN

L11 61 SULFONATE AND RESORCIN

=> d scan

L11 61 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3-Benzenediol, polymer with 1,2-ethanediylbis(oxy-2,1-ethanediyl)
bis(4-methylbenzenesulfonate) (9CI)

MF (C20 H26 O $\hat{8}$  S2 . C6 H6 O2) x

CI PMS, COM

\*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s 111 and 1/nc 53808309 1/NC L12 45 L11 AND 1/NC

=> d scan

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Resorcinol, 4-amino-5-methoxy-, 3-benzenesulfonate (8CI)
MF C13 H13 N O5 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Resorcinol, 2,4,6-trimethyl-, di-p-toluenesulfonate (8CI)
MF C23 H24 O6 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

- L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
- IN Formaldehyde, reaction products with ammonia and resorcinol, methanesulfonates (salts)
- MF Unspecified
- CI MAN, GRS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Resorcinol, 2,5-dimethoxy-, dibenzenesulfonate (8CI)

MF C20 H18 O8 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Ethanesulfonic acid, 1,2-dibromo-, m-phenylene ester (7CI, 8CI)

MF C10 H10 Br4 O6 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

MF C15 H13 N O8 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Resorcinol, 5-methoxy-4-nitro-, 3-acetate 1-benzenesulfonate (8CI)
MF C15 H13 N O8 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN 1,3-Benzenediol, 5-methoxy-, monobenzenesulfonate (9CI)
MF C13 H12 O5 S

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN
IN Resorcinol, 2,5-dimethoxy-, di-p-toluenesulfonate (8CI)
MF C22 H22 O8 S2

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Resorcinol, 2,4,6-triiodo-, di-p-toluenesulfonate (8CI)

MF C20 H15 I3 O6 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L12 45 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN IN Resorcinol, 4-chloro-, dimethanesulfonate (7CI) MF C8 H9 C1 O6 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s sulfonic acid and resorcin

262985 SULFONIC

6126181 ACID

8396 ACIDS

6132419 ACID

(ACID OR ACIDS)

262768 SULFONIC ACID

(SULFONIC (W) ACID)

3708 RESORCIN

L13 104 SULFONIC ACID AND RESORCIN

 $\Rightarrow$  s 113 and 1/nc

53808309 1/NC

L14 33 L13 AND 1/NC

## => d scan

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, diester with 4,4'-methylenebis[2-methyl-1,3-benzenediol] (9CI)

MF C35 H24 N4 O10 S2

CI IDS

CM 1

CM 2

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Benzenesulfonic acid, 2,4(2,6 or 3,5)-dihydroxy- (9CI)

MF C6 H6 O5 S

CI IDS, COM

D1-SO3H

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 2,7-Naphthalenedisulfonic acid, 4-[(2,4-dihydroxyphenyl)azo]-5hydroxy-, ion(3-) (9CI)

MF C16 H9 N2 O9 S2

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1,3,5-Benzenetrisulfonic acid, 2,4-dihydroxy- (8CI, 9CI)

MF C6 H6 O11 S3

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Ethanesulfonic acid, 1,2-dibromo-, m-phenylene ester (7CI, 8CI)

MF C10 H10 Br4 O6 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, thiobis(3-hydroxy-p-phenylene) ester (8CI)

MF C32 H18 N4 O10 S3

$$N_2$$
 $O = S - O$ 
 $O = S$ 
 $O = S$ 

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

In Iron, complexes with diazotized 4-aminobenzenesulfonamide, diazotized 3-aminobenzenesulfonic acid, diazotized 3-amino-4-hydroxybenzenesulfonamide, diazotized 3-amino-4-hydroxy-N-phenylbenzenesulfonamide, diazotized 5-amino-2-(phenylamino)benzenesulfonic acid and resorcinol, sodium salts

MF Unspecified

CI MAN, GRS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Copper, diazotized 3-amino-4-methoxybenzenesulfonic acid-diazotized 4-nitro-1,3-benzenediamine-resorcinol coupling products ammonium sodium complexes

MF Unspecified

CI MAN, GRS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Copper, diazotized 4-amino-3-hydroxy-7-nitro-1-naphthalenesulfonic acid-diazotized o-toluidine-resorcinol coupling products complexes

MF Unspecified

CI MAN, GRS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 5-Thiazolesulfonic acid, 2-[(2,4-dihydroxyphenyl)azo]- (8CI, 9CI)

MF C9 H7 N3 O5 S2

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1-Naphthalenesulfonic acid, 4-[(2,4-dihydroxyphenyl)azo]-3-hydroxy-(7CI, 8CI, 9CI)

MF C16 H12 N2 O6 S

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):5

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, 1,1'-diester with 4,4'-sulfinyldiresorcinol (7CI, 8CI)

MF C32 H18 N4 O11 S3

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

2,7-Naphthalenedisulfonic acid, 4-[(2,4-dihydroxyphenyl)azo]-5hydroxy- (7CI, 8CI, 9CI) C16 H12 N2 O9 S2

MF

CI COM

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 1-Naphthalenesulfonic acid, 3-diazo-3,4-dihydro-4-oxo-, diester with 4,4'-methylenebis[2-methyl-1,3-benzenediol] (9CI)

MF C35 H24 N4 O10 S2

CI IDS

. CM 2

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN Chromium, diazotized 2-amino-4,6-dinitrophenol-diazotized 6(or 7)-amino-4-hydroxy-2-naphthalenesulfonic acid-formaldehyde-resorcinol reaction product coupling products complexes

MF Unspecified

CI MAN, GRS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L14 33 ANSWERS REGISTRY COPYRIGHT 2003 ACS on STN

IN 2,7-Naphthalenedisulfonic acid, 4-[(2,4-dihydroxyphenyl)azo]-5hydroxy-, ion(4-) (9CI)

MF C16 H8 N2 O9 S2